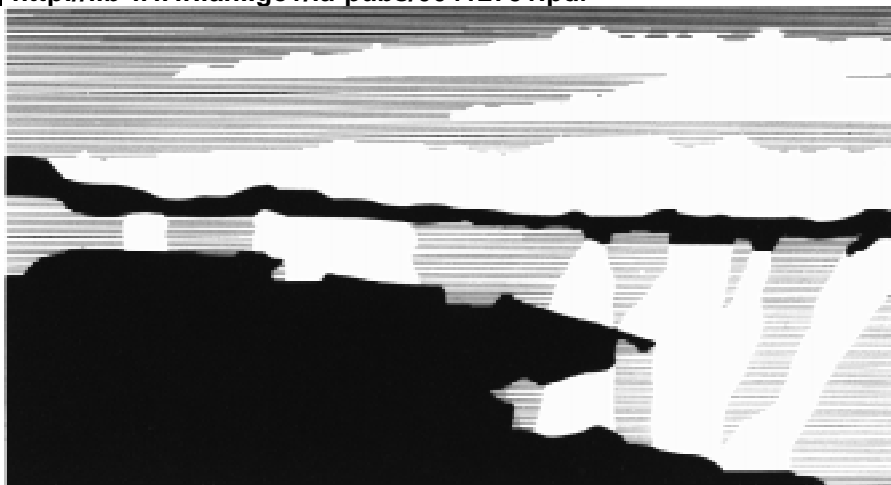


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# **Using the Malcolm Baldrige Quality Criteria: A Viable Tool for Assessing Organizational Change**

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## **Abstract**

In September 1997, the Los Alamos National Laboratory Research Library applied for a Quality New Mexico Award, which involved completing a self-assessment based on the Malcolm Baldrige National Quality Award criteria. This paper defines those quality criteria and outlines the Library's application process. The Research Library staff benefited from both the application process and feedback; as a result of them, we are now implementing steps to increase our effectiveness in providing valued products and services to our customers. These steps are helping us strengthen our competitive edge to ensure our future prosperity within the Laboratory.

## **Introduction**

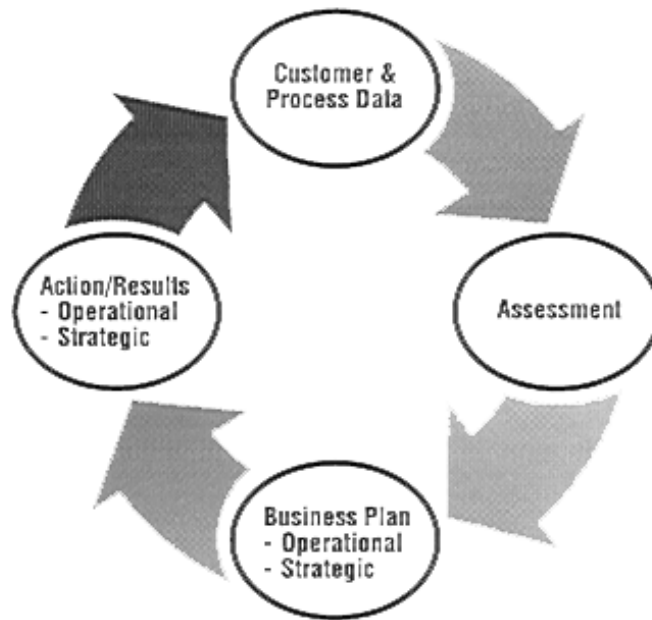
The Los Alamos National Laboratory Research Library is responsible for providing science and technology research information in support of the Laboratory's mission. Today, that mission is to reduce the global nuclear danger, which requires innovative science. The Laboratory has a firmly established reputation as one of the premier research and development institutions in the world.

The Research Library is a mid-sized science library, with a budget of \$8.0 million. Our mission states: "In partnership with library customers we facilitate access to and enhance the usability of information that contributes to our mutual success." The Research Library has five product and service lines that support scientific research: books, journals, electronic databases, technical reports, and customer services. The library currently supports a high level of product usage each month, including

- 1.1 million electronic transactions,
- 35,000 paper transactions, and
- 5,000 service transactions.

In 1991, we decided to develop a formal strategic business management (SBM) system based on the principles of Total Quality Management. We began by training staff members in formal quality principles. We then established four teams responsible for assessing and improving the processes involved with our five products and services (one team is responsible for both books and journals). Over the past three years, our approach to setting operational and strategic direction for the Library to support our mission and

vision has continued to evolve. Our SBM system now incorporates a four-step planning



*The Research Library's Quality and Planning Cycle*

cycle whose steps reinforce one another: customer and process data, performance assessment, business plan, actions and results (see figure).

### **Malcolm Baldrige Award Criteria**

The Malcolm Baldrige National Quality Award was initiated in 1988 by the Department of Commerce and the National Institute of Standards and Technology to promote Total Quality Management as an important approach for making products and services in the United States among the best in the world. For the award, organizations must complete a self-assessment that provides data on their key processes and results. The self-assessment is divided into seven categories:

1. **Leadership:** the leadership system and senior leader's personal leadership.
2. **Strategic planning:** how the organization sets strategic directions, and how it develops the critical strategies and action plans to support the directions.
3. **Customer and market focus:** how the organization determines requirements, expectations, and preferences of customers and markets.
4. **Information and analysis:** the selection, management, and effectiveness of use of information and data to support key company processes and action plans.
5. **Human resources:** how the organization enables employees to develop and utilize their full potential, aligned with the company's objectives.

6. **Process management:** the key aspects of process management, including customer-focused design, product and service delivery, support, and supplier and partnering processes.
7. **Business results:** the organization's performance and improvement in key business areas—customer satisfaction, financial and marketplace performance, human resource results, supplier and partner performance, and operational performance.

The Quality New Mexico Award (QNMA) annually recognizes organizations for excellence based on these Baldrige Award criteria. The QNMA application process entails completing a self-assessment and receiving a site visit from a Board of Examiners, who evaluate the application. The Board then provides written feedback highlighting the applicant's strengths and areas for improvements. Successful applicants are also recognized at a meeting of the New Mexico State Legislature and receive awards during the annual conference of the Quality New Mexico organization.

### **QNMA Application Process**

In September 1997, the Research Library leaders decided to apply for the Quality New Mexico Award. A team of seven staff members was formed to write the Library's application. The team's mission was to submit the best possible Quality New Mexico application that would also

- accelerate our focus on quality;
- improve our ability to analyze Research Library quality processes in a Baldrige context, identifying strengths and areas for improvement; and
- strengthen our competitive edge to assure our future prosperity within the Laboratory.

Each team member coordinated input for one of the seven self-assessment categories. All staff contributed data and information to develop the concepts outlined by the team. Team members updated the application daily based on staff comments and suggestions. They created a central database that contained the most recent version of the application so that it was readily accessible. Data charts were coordinated to support the seven categories in the self-assessment. The final application was edited by a Laboratory editing and composition team, who worked on site in the Library with us. The collaboration and daily feedback improved the final 50-page application, which was sent to Quality New Mexico in early October. The application was completed in three weeks.

Once the application was submitted, the QNMA team shared the application's contents with all Library staff. A qualified Baldrige examiner from the Laboratory trained us in how to evaluate an application based on the Baldrige Award criteria. We then divided into our four process teams to evaluate the Library's strengths and areas for improvement in each self-assessment category. The Lab's Baldrige examiner also conducted a "practice" site visit with us, which included meetings with individual staff members to

clarify the Library's processes and way of doing business. This practice visit allowed us to discuss what we were doing at the team level and prepared us for the Quality New Mexico Board of Examiners site visit in January 1998.

After the visit, the QNMA Board's official feedback report identified the Library's strengths and areas for improvement. The Board's assessment of our strengths was that we had integrated a strong customer focus with visionary planning and were using a well-defined process, Strategic Business Management, for managing our business. In terms of areas for improvement, the Board noted that we needed to

- strengthen ties between the vision and the business plan,
- increase data for suppliers,
- increase comparative data and market data, and
- integrate employee satisfaction data into business planning.

In February 1998, the Library received a Quality New Mexico Award.

### **Value of the QNMA Application Process**

Our QNMA team effectively collaborated with all Library staff members to complete the 50-page application within only three weeks. Although there was deadline pressure, the team members felt that the experience was valuable and that the application was done professionally.

The application process also served as a basis to focus on implementing quality principles. As mentioned earlier, after submitting our application, we divided into teams to assess each of the application's seven categories, and the teams presented their findings to all staff members. Several of the presentations were creatively done, and each team focused on how to look analytically at the application.

In addition, all staff members participated in the Board of Examiner's site visit. Many staff also attended the winners' day at the New Mexico State Legislature, and participated in the Quality New Mexico annual conference. Press releases from the Quality New Mexico organization and the Research Library provided visibility for the Library nationwide. The Laboratory also received recognition for its quality efforts based on our award.

Finally, the feedback and lessons learned from completing the QNMA application gave us valuable insight into the Library's strengths and areas for improvement. This insight enabled Library leaders to develop plans for improvement and change for the next year. It also paved the way for a longer-term positive result: having completed our own self-assessment, we are now ready to collaborate with other organizations for benchmarking and comparing process data.

## **Results from the QNMA Process**

Our purpose in applying for the Quality New Mexico Award was to learn: to measure the Library's services and staff against a national standard of quality. We will continue to capitalize on our strengths and to prioritize our areas of improvement so that the Research Library systematically improves. The following actions have been started to address our areas for improvement:

- Library leaders have drafted a plan to improve the ties between the Research Library's annual business plan and vision. This strategic plan will tie our current business plan to our vision, which looks ahead 5–10 years.
- We have assigned an employee to act as our supplier manager. This employee will focus on improving supplier communication and processes. She will also develop collaborative partnerships with the major Research Library suppliers.
- We have assigned an employee to act as our quality coordinator. This employee will support Library leaders, product/service owners, and process teams by providing quality expertise, planning, training, and facilitation in the implementation of Dr. Deming's PDCA (Plan, Do, Check, Act) steps for all processes.
- A plan to integrate employee (staff) satisfaction data into Library processes has been proposed. The method for measuring the level of employee satisfaction will be consistent with our efforts to collect and analyze data on customer satisfaction. Future planning will incorporate employee satisfaction data when making priority and change decisions.
- Our current business plan includes a strategy to increase comparative data-gathering skills, utilization, and implementation throughout the Library. The Library's customer manager will lead this strategy to assess methodology, train staff, and identify key processes to analyze with other analogous organizations. During the next year, we will begin collaborating with other libraries to determine best practices and assess how we can improve our processes.

## **Conclusion**

The Research Library has been on a journey to improve our way of doing business as we move into the 21<sup>st</sup> century. We have maintained our strong customer focus, and our customers have been supportive of our efforts to improve Library products and services. We have worked toward bringing Library products to researchers' desktops in order to increase their productivity. We have also formalized how we work as an organization to support our operational and strategic directions.

Our Quality New Mexico Award application—along with the Baldrige quality self-assessment it required—was another step along the path that will enable us to move

successfully into the 21<sup>st</sup> century. The award and public recognition it has brought have been gratifying to the staff, who have worked hard to move the Research Library forward. Their real value lies ahead, however, as we take what we have learned from the award process, apply it to our future organization, and continue to provide valued products and services to our customers.